

“...like the problem itself, solutions will be complex and often hard to agree on; to be successful they will need to be based on scientific information, including information provided by social and economic sciences. In addition, to be successful, consensus will be needed about the size of the investments to be made in solving the problem and how the costs should be allocated. This means that solutions will have to be regionally based, just as the salmon problem has regional variations.”

— excerpted from the Executive Summary of “Upstream: Salmon and Society in the Pacific Northwest,” National Research Council, 1996

Chapter Summaries

The following is a chapter-by-chapter summary of King County’s response report to the proposed ESA listing, “Return of the Kings: Strategies for the long-term conservation and recovery of the chinook salmon.”

Chapter 1: Introduction

King County can be proud of the tremendous strides it has made in the past to support and implement programs to protect our salmon resources. That list includes watershed basin planning, water quality programs, studies on the potential water reuse, the Cedar River legacy, open space and resource land purchases, Waterways 2000 and other important activities that protect our environment as a whole.



The benefits of these recent past efforts will not be fully realized for many generations of chinook salmon. However, it is the premise of the King County strategy that the beneficial impacts of its past actions, combined with early actions to conserve salmon and its commitment to long-term recovery strategies detailed in the response report, will gradually reverse the decline and lead to the recovery of the species.

Tri-County Proposal: Short-term and long-term strategies

The Tri-County proposal includes both short-term and long-term strategies that draw together the efforts at the Tri-County and watershed level. (Formally called Water Resource Inventory Areas (WRIAs), these areas were established in the early 1970s by the State of Washington for the purpose of resource planning and management. A WRIA essentially is an administrative unit that closely follows watershed boundaries. In the Tri-County area, there are six WRIAs: Stillaguamish, Snohomish, Cedar-Sammamish, Green/Duwamish, Puyallup-White and Nisqually.)

Short-term strategies entail immediate, aggressive actions needed to protect the chinook salmon from further declines. These early actions include:

- Habitat protection and acquisition projects drawn from existing science-based plans and information;
- Increased use of the State Environmental Policy Act to better protect salmon habitat;
- Evaluation of programs and regulations to determine their effectiveness in contributing species conservation;
- Enhanced enforcement of existing protective regulations;
- Public education and involvement; and other initiatives.

These early actions come from both the work of individual municipal jurisdictions as well as coordinated efforts at the watershed level.

Over the long-term, the Tri-County effort is a coordinated, watershed-based salmon recovery strategy. It will be focused on implementing an adaptive management approach to conservation through the watershed conservation plans. Basing the long-term recovery plan upon watershed conservation plans will allow stakeholders to help shape the overall strategy and demonstrate a commitment to the long-term goal of species recovery. This outreach is critical in order to effect the changes in our cultural and institutional structures (e.g. political jurisdictions, public values, etc.) ultimately necessary to recover threatened and endangered species.

Coordinated with State of Washington

The Tri-County approach joins together with the State of Washington's draft statewide strategy to recover salmon, "Extinction Is Not An Option." The Tri-County approach also recognizes that the long-term effort to conserve and recover salmon cannot be successful without the involvement of the tribes, who have unique environmental, economic and cultural interests in salmon recovery.

The chinook listing is anticipated to be followed in June by the United States Fish and Wildlife Service (USFWS) listing of the bull trout, and within a year or two, potentially by listings of the kokanee and coho salmon. Multiple listings will require coordinated rule making by NMFS and USFWS, under the ESA, to ensure consistency and a multi-species approach to recovery.

Chapter 2: Scientific and Management Approach

A dominant cause for the decline of salmon is the degradation of suitable habitat conditions during the freshwater and estuarine portions of the salmon life history. Many factors – scientific, institutional, political – have contributed to the loss of habitats and populations which are pushing salmon toward extinction.

The intent of this chapter is to discuss the changing scientific framework in regard to salmon management; to explore some of the challenges of restoring salmon within an urban environment; to describe the proposed management framework and goals of the Tri-County comprehensive conservation and re-

covery strategies; and to explain the factors that produced the Tri-County as the conservation area.

Within the scientific community, there is a movement away from addressing the problem of salmon decline on a species-by-species basis.

Rather, an attempt is

being made to move toward multi-species and ecosystem-based management strategies. King County's approach is intended to be ecosystem-based, multi-species and precautionary.

However, even if we employ the principles of ecosystem and conservation ecology, the urban area of Puget Sound presents an unusual challenge to the conservation and recovery of salmon. Much of the native landscape has been irretrievably altered and will require considerable intervention and management if wild salmon populations are to survive and flourish.

Still, some level of remediation is necessary even in those places where the urban landscape has eliminated the native one. In these places, the achievement of functional salmon habitat – even if some structural or process elements of the historic ecosystem cannot be restored – is necessary for salmon survival. *(See Chapter 2 for details on the County's priorities for restoration and rehabilitation.)*

King County intends to tackle these challenges by using an “adaptive management” approach. Adaptive management is defined as “the periodic reappraisal of management goals and activities based on information gathered explicitly to test these goals and activities.” In short, this means that salmon conservation activities are treated as experiments with explicit objectives and predicted outcomes. Indicators of the outcomes are selected and assessment questions devel-

